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SUBSTANCE, ESSENCE AND ATTRIBUTE IN SPINOZA, *ETHICS* I

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ABSTRACT OF: *SUBSTANCE, ESSENCE AND ATTRIBUTE IN SPINOZA: ETHICS I.*
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Both Descartes before Spinoza and Leibniz after him continued the medieval Aristotelian tradition of 'supernaturalizing' Aristotle's conception of God as first substance, and of treating God as the creator of natural substances. Because Spinoza adopts the terminology of that tradition, while identifying Nature with God, he is widely taken to supernaturalize Nature. This presupposes that he conceives his metaphysical axioms as the medievals did theirs, as true of all logically possible worlds, and *per se nota* to the human intellect. Unlike them, however, he holds that the "mechanical principles of nature," while *per se nota*, are true only of the actual world. This suggests that his conception of what is *per se notum* in metaphysics is holistic, and presumes experience of the actual world. Assuming this, it is shown that his theory of substance in *Ethics* I must be elucidated on naturalist lines. The objection raised by de Vries to E1p10s, that really distinct attributes cannot, as Spinoza maintains, constitute one and the same substance (or essence of a substance), is shown to be valid on the 'supernaturalizing' interpretation of Spinoza's theory, and Spinoza's replies to it in Ep9 and E1p10s are shown to be question-begging. However, on the naturalist interpretation of it, Spinoza's doctrine in E1p10s is shown to be defensible. Pollock's explanation of why his arguments in E1p10s and Ep11d are incompatible with the naturalist interpretation is adopted.

SUBSTANCE, ESSENCE AND ATTRIBUTE IN SPINOZA, *ETHICS* I

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1. Substance Supernaturalized: the Medieval Aristotelians and Spinoza.

Spinoza's 'first philosophy', like Aristotle's, is a theory of substance. To the question, 'What exists?' Aristotle had, in effect, answered: First of all, individual substances -- which are numerous, and of various kinds; then non-substantial independently existing material stuffs like earth, water, air and fire; and finally dependent existents or accidents. To the same question, Spinoza in effect answers: If you mean 'What exists independently?' the answer is 'Substance' -- but there is only one substance, although there are also individual beings that depend on it, which may be called 'modes', to distinguish them from Aristotle's accidents. While these answers differ radically, they are of the same form. Both divide existents into those that are independent and those that are dependent; and both recognize substances as the primary independent existents.

Aristotle and Spinoza also agree in not treating the existence of individual things as problematic. Neither asks why there is a world at all. Both accept without question that there is a world inhabited by human beings, themselves among them, and that it is intelligible: that if it is investigated intelligently, its general nature can be ascertained, along with the place of human beings in it. In doing so, some truths will be discovered that will need no further explanation, and the rest will turn out to be explicable by reference to them.

They do not, it is true, agree about what the general nature of the world they inhabit is. Aristotle, for example, believed that the sphere of the moon and the world above it are composed of a stuff entirely different from anything found in the sublunary world; that the motions of the spheres are guided by 'separate' substances that are pure Intelligences, and not material at all; and finally, that above these separate substances there is a first substance, also a pure Intelligence, which alone strictly deserves to be recognized as divine.

By thus distinguishing immaterial separate substances from those whose forms must be in matter in order to exist, Aristotle invited speculation whether their existence is intelligible in a way in which that of 'hylomorphic' (that is 'matter-form') substances is

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not. The medieval Aristotelians -- Muslim, Jewish and Christian -- accepted the invitation. Pure Intelligences, they concluded, have no potentiality to cease to be; and God, the first substance, has no potentiality whatever: he is pure actuality, and as such cannot not exist. The existence of God is therefore intelligible as that of nothing else is: namely, that his non-existence is simply unintelligible. For hylemorphic substances to exist at all it is necessary that they be created by a substance that needs no creator -- a substance that necessarily exists in its own right. Such a substance can be identified with the God of *Genesis*.

This medieval development transformed Aristotle's first philosophy from a naturalist metaphysics into a natural theology: instead of confining themselves, like Aristotle, to exploring the character of a natural world the existence of which is simply accepted, medieval philosopher-theologians found the existence of the natural world intrinsically unintelligible, requiring explanation by reference to a supernatural creator. Nor did the makers of the scientific revolution question the correctness of their doing so. Neither Galileo and Descartes before Spinoza, nor Leibniz and Newton after him, betrayed the slightest doubt that the existence of the natural world must be explained by the common religious doctrine that it is created by a supernatural substance.

It is tempting to read the theology of *Ethics* I as a radical variation on this common theme, in which Nature is supernaturalized by identifying God with it. So read, Spinoza transfers to Nature the metaphysical intelligibility of the supernatural immaterial God of tradition; and he says of the natural world, now conceived as a single substance, most of what Averroes, Maimonides and Aquinas said about God.

The principles of supernaturalized metaphysics are truths about being considered solely as being: that is, they are not confined to any one species of being, such as the being of material things. And, since they explain why it is that whatever exists does exist, they do not hold merely for the things that actually do exist. Although as far as I know no medieval Aristotelian spoke so, Muslim, Jewish and Christian Aristotelians were all committed to acknowledging the principles of their metaphysics as true of being in all logically possible worlds.

It was not considered to matter that such principles plainly cannot be ascertained empirically, by studying the beings in the possible world we actually inhabit. From Aristotle to Descartes, philosophers had agreed that the fundamental principles of metaphysics are *per se nota* or self-evident to any finite mind that considers them clearly. Descartes attributed this to a *lumen naturale* with which all human beings are endowed. And since Spinoza's first publication was a restatement, in geometrical form, of the first two parts of Descartes' *Principia*, it would not be surprising if he had followed him in this.

Whether Spinoza, like Descartes, continues with the medieval Aristotelians to supernaturalize the first substance, depends on how he conceives the axioms from which he derives his theory of it. Following Descartes, he implicitly accepts the rule that nothing is to be deduced except from principles *per se nota*: thus, he censures Descartes himself for

departing from it in his theory of the union of the human mind with the human body (E5, pref. -- G II, 279/20-25). But does he understand what is it for a principle to be '*per se notum*' as Descartes, or the Aristotelians, did? His treatment of cognition in *Ethics* II differs sufficiently from theirs for the question to be disputable. Yet we cannot understand his theory of substance, or any other metaphysical theory in the *Ethics*, until we answer it.

2. The Mechanical Principles of Philosophy in Spinoza.

Although hypotheses about the sense in which Spinoza thought his axioms to be *per se nota* can be established only by an accurate study of his theory of cognition, a paper on Spinoza's theory of substance affords no scope for such a study. However, its result can to some extent be anticipated by following the example of Sir Frederick Pollock in the last century and of Edwin Curley in this,¹ and taking Spinoza's treatment of what he calls "the Mechanical principles of Philosophy" (Ep13 -- G IV, 67/1) as a guide to the sense in which he offers the metaphysical axioms of the *Ethics* as *per se nota*. This would be invalid for both Aristotle and Descartes, who deny that the principles of physics hold for everything there is; but it is not invalid for Spinoza, who asserts it.

First of all, it is necessary to get rid of an assumption that is prevalent in the anglophone world, despite Curley's vigorous polemics: namely, that Spinoza is what Jonathan Bennett calls "a causal rationalist." A causal rationalist is, one who "does not distinguish causal from logical necessity" as Hume has taught us to do; and who "thinks that a cause relates to its effect as a premise does to a conclusion that follows from it."² On this assumption, Spinoza conceives causal laws themselves as truths that are *per se nota* in whatever way the laws of logical implication are: a topic on which he has little or nothing to say.

The evidence Bennett himself offers for this is not strong.³ Thus on a phrase in *Ethics* IV, Preface, "the reason or cause why Nature acts" (G II, 206/26-27), he comments that Spinoza "thinks he is talking of one relation, not two."⁴ Now the use of '*ratio*' in Latin to stand for a cause must be as common as the related use of 'reason' in English to do so; and neither use implies that a cause is related to its effect as is a premise to a conclusion that follows from it.

The texts to which Bennett appears to attach most importance are the "many ... turns of phrase"⁵ in Spinoza like the comparison he draws in commenting on the effects of despondency on behaviour:

These things follow from this affect [i.e. despondency] as necessarily as it follows from the nature of a triangle that its three angles are equal to two right angles (E4p57s).

Why Bennett interprets this comparison as implying causal rationalism is not clear. Since despondency, like all affects, is ultimately defined by reference to the effects of external causes on human beings, and of ideas of those effects, that certain effects logically follow

from despondency so defined does not show that the laws according to which those causes have those effects are self-evident in whatever way the laws of logical implication are.⁶

The greatest single innovation of seventeenth century science was to recognize motion as well as rest as inertial, according to Descartes' law:

Each and every thing, in so far as it can, always continues in the same state; and thus what is once in motion always continues to move (*Princ. Phil.* II, 37 -- AT VIII, 62).

Yet worlds can certainly be conceived in which the Aristotelian alternative to Descartes' law would be true: that everything continues in a state of rest, or returns to it, unless some cause keeps it in motion. In a terminology Spinoza did not use, but to which he could not have objected, Descartes' law is not true of all possible worlds, and neither it nor Aristotle's can be perceived to be true of the actual world without considering how that world differs from others that are possible.

What then does Spinoza think were "the reasonings of ... Descartes" by which he established his law (cf. Ep13 -- G IV, 67/7-8)? According to his own restatement *more geometrico* of the first two Parts of Descartes' *Principia*, those reasons are to be found in Part II, 37-38 (DPP II, p14cd -- G I, 202/5-6).

Descartes there begins by asserting generally that "each thing, in so far as it is simple and undivided, always remains in the same state, as far as it can, and never changes except as a result of external causes" (AT VIII, 62/10-13). This, of course, does not tell us what are properties are states of things, and what not: for example, it entails that if, as Aristotle held, a thing's position at an instant is among its states, then its motion from one position to another must have an external cause. Descartes therefore proceeds to imply that motion is a state ("nor is there any ... reason, if [a thing] moves, to think that it will ever lose its motion of its own accord" -- AT VIII, 62/17-20); but at once acknowledges that "we tend to believe what we have apparently experienced in many cases holds good in all cases -- namely that it is of the very nature of motion to come to an end" (AT VIII, 62/27-63/1).

To show that what we thus tend to believe is false, he first briefly argues that what we experience cannot be more than apparent, because nothing can by its own nature tend toward its opposite (AT VIII, 63/3-5). But that assumes what it purports to prove; for if a thing's state with respect to place is to be in the place in which it is, then its apparent tendency to stop moving would not be towards its opposite.⁷ Finally, however, Descartes finds the reason which has in fact persuaded physicists of the truth of his law:

[O]ur everyday experience of projectiles completely confirms this [law]... For there is no other reason why a projectile should persist in motion for some time after it leaves the hand that throws it, except that what is once in motion continues to move until it is slowed down by bodies that are in its way (AT VIII, 63/6-11).

What confirms the law, in short, is that it is consistent with the complex idea of motion that is formed when ideas of its varieties, such as projectile motion, are not overlooked; and that its alternatives, like Aristotle's, are not consistent with it.

That motion is a state is considered by Spinoza to be *per se notum*, because it will be perceived to be true of the actual world by anybody who reflects on his idea of motion generally, as he actually encounters it (which, *inter alia*, is of the motions of projectiles which he tries to stop). Of course, he must take care not to confuse that idea with an idea of some specific motion (like that of a heavy trunk dragged across the floor). A law so established is not *per se notum* in the sense of being self-evidently true in all possible worlds.

Once scientists have established the law of inertial motion and the other 'Mechanical principles of Philosophy' by reflecting on their ideas of motion and rest as they are experienced, they can proceed, by planned observation and experiment, to ascertain what, in Newton's phrase, 'the system of the world' is, so far as it is mechanical (cf. Ep13 -- G IV, 66/2-67/12). Unfortunately, however, Spinoza's exchange with Boyle through the mediation of Oldenburg reveals that the methodology of the more speculative founders of the mechanical school leaves room for an obstacle to experimental research which which they failed to perceive (Ep1-7,11,13-14).

Boyle claimed that when a glowing coal is dropped into melted nitre (potassium nitrate), the nitre is decomposed into a volatile component (spirit of nitre, or nitric acid) and a fixed one (fixed nitre); and that it can be recomposed out of them. Against this, Spinoza propounds an hypothesis about how the different observed properties of what Boyle took to be the volatile and fixed components of nitre may be explained on the supposition that they are two forms of the same substance, as water and ice are. He then proceeds to object that, in interpreting Boyle's experiment, it cannot be assumed that nitre is decomposed by the coal: a further experiment is needed to show that the two alleged components are not two forms of the same substance (Ep.6 --G IV, 16/10-21/3; Ep13 -- G IV, 64/28-69/3).

Like Descartes before him, Spinoza did not notice that the freedom of hypothesizing he allowed himself in interpreting Boyle's experiment would be an obstacle to establishing anything by any experiment. As Rupert and Marie Hall have pointed out,

Spinoza's position seems to be that if two or more equally rational accounts of a phenomenon can be proposed, there is no reason to choose one as true rather than another. To him, it was all one whether Boyle's experiments were explained by *supposing* nitre and its spirit to be the same, or by *supposing* (as he thought Boyle did) that they are different. It did not, apparently, strike him as worthy of consideration that Boyle's 'supposition' was supported by qualitative evidence, while his own ran counter to that evidence. Or that if an infinite range of supposing is allowed, no certainty is ever attainable.⁸

Experimental method in science, as the Halls observe, requires a rule like that proposed by Newton in his *Principia*:

In experimental philosophy we are to look upon propositions inferred by general induction from phenomena as accurately or very nearly true, *notwithstanding any contrary hypotheses that may be imagined*, till such time as other phenomena occur, by which they may either be made more accurate, or liable to exceptions.⁹

Without such a rule, virtually no mechanical explanation of a phenomenon can be even provisionally established.

Although Spinoza does not perceive the need, within the mechanical conception of physics, for a methodological rule like Newton's, nothing in his system forbids him to accept one. What matters for our present purpose is that, like Newton, he distinguished experimentally testable hypotheses about what the specific mechanical structure of the world is from the principles of the mechanical conception, which, while dependent on experience generally, are not treated as normally open to revision in view of empirical findings.

While he does not explicitly formulate the view of science he works with, it appears to be, like W.V. Quine's, holistic. Anybody's idea of how things are is a complex whole, in which some parts are relatively more theoretical and others relatively more empirical, the more theoretical parts being less readily revised in response to the addition of new more empirical parts than are the old more empirical parts. The most theoretical parts can reasonably be described as *per se nota*, in that virtually no new ideas will be considered a sufficient reason for modifying them. But the more theoretical parts of anybody's complex idea of how things are have the same kind of ground as the more empirical: a ground which Spinoza states in his theorem that "there is nothing positive in ideas on account of which they are called false" (E2p33). The theoretical ideas expressed in the axioms of metaphysics and the mechanical conception of nature are wholly positive, because they negate nothing positive in our more empirical ideas.

3. Spinoza's Naturalization of Metaphysics.

If this view of what Spinoza took the axioms of metaphysics to be is true, then, far from supernaturalizing nature, he naturalizes God. And so, unlike Descartes before him and Leibniz after him, he does not use the language of traditional theology in its traditional sense when describes the infinite substance he calls '*Deus sive Natura*' in terms of it.

The new, naturalized senses he gives to theological terms appear again and again in the first philosophical book he published to express his own ideas: the *Tractatus Theologico-Politicus*. In it, he repeatedly contrasts the imaginative character of prophetic utterances about God, as exemplified in the Jewish and Christian scriptures and in popular religious speech, with whatever non-imaginative equivalents they have.

Now we can therefore assert without scruple that the prophets did not perceive things revealed by God except by the help of imagination, that is, by mediating words or images, some of them true, others imaginary... I could, it is true, say like others that it was brought about by the power of God; but then I would be seen to babble. For it would be the same as if I were to offer to explicate the form of some individual thing by some transcendental term. For all things come about through the power of God; more precisely, because the power of Nature is nothing but the power of God itself, it is certain that we do not understand the power of God to just the extent that we are ignorant of natural causes; and so it is foolish to run back to that same power of God, when we do not know the natural cause of something, that is, that power of God itself..

And so, since the prophets perceived things revealed by God by the help of imagination, it is beyond doubt that they were able to perceive many things beyond the limits of the intellect; for many more ideas can be put together from words and images than from those principles and notions alone on which all our natural cognition is built up (TT-P, 1 -- G III, 28/3-25).

And in what he says about the special revelation to the Jews, Spinoza never deviates from saying that to the extent that their imaginations go beyond the limits of the intellect, what prophets (Jewish and non-Jewish) reveal is practical, not theoretical.

... if anybody skims though [the Jewish scriptures], he will see clearly that the Hebrews excelled the rest of the nations in this alone, that they conducted those affairs which pertained to the security of life prosperously, and overcame great perils, and that for the most part solely by the external help of God; in all else, however, they were equal to the rest, and God was equally propitious to all. For it is established (as I have shown in the preceding chapter) that, with respect to the intellect they held very crude ideas about God and nature, and so were not chosen by God above the rest with respect to intellect... (TT-P, 3 -- G III, 47/31-48/4).

4. Spinoza's Metaphysics (I): Fundamental Concepts.

We may now at last turn to Spinoza's theory of substance itself, as it is set out in *Ethics* I. Its fundamental concepts are expressed by four words: the verbs 'to be', 'to conceive' and 'to cause', and the noun 'essence'.

Throughout the *Ethics* Spinoza treats a thing as *being* or *existing* if and only if it is an individual, independent or dependent, in the world we inhabit. He recognizes no transcendent or supernatural beings. However, since the world is constantly changing, human beings often must and do refer to individuals the actual existence of which they do not assert; and when he himself does so Spinoza often uses the Latin Aristotelian term '*essentia*', and speaks of himself as thinking of the *essences* of those individuals.

This usage is sufficiently exemplified in the contrasts he draws between essence and existence in God on one hand, which he holds to be identical, and essence and existence in things "produced by God" on the other, which are not identical (E1p20,24). A being whose existence is identical with its essence is simply one that, according to laws of nature, can neither be created nor destroyed. To think of it is to think of an eternal necessary existent. Such a being, of course, is no more supernatural than one of Epicurus' atoms would be, if there were such things. By contrast, a being whose essence is not identical with its existence is one whose conservation is neither excluded nor required by the laws of nature.

Sometimes, it must be acknowledged, Spinoza speaks of certain 'natures' (i.e. essences) as involving self-contradiction, and so as being the reason why nothing exists of which they are the essences (e.g. E1p11d -- G II, 53/3-5). However, his normal usage appears in his theorem that God or Nature is the cause not only of the existence of things, but also of their essence. The sense of that theorem is that the laws of nature determine whether the existence of a certain finite individual is possible within nature (whether there is such an essence); and that what other finite things exist in nature determine whether that essence exists, and, if so, when (E1p25).

Existents and their essences are both individual. Spinoza sometimes speaks of essences of kinds (e.g. E1p17s -- G II, 63/18-23); but the essence of an individual, Socrates say, is not the essence of his kind (the essence of man): it is as individual as he is.¹⁰

To *conceive*, as Spinoza understands it, is to form an idea of something. What is conceived is always a possible existent, whether actual or not; and the idea by which something is conceived is an intellectual representation of it in which it can be said to 'exist objectively'. The concept of an idea or intellectual representation was introduced into philosophy by Descartes. Spinoza, like his up-to-date European contemporaries, treats it as a working concept common to all who think clearly. The so-called *Port Royal Logic* is a good source for those who today seek a better grasp of that concept.¹¹

The error to which students of Spinoza today are most prone is to treat ideas as propositions or as their constituents (according either to Aristotelian or to post-Fregean logic). Spinoza and Descartes disparaged logic as a discipline the rules of which have at best a limited practical significance. Whereas cognizing something, whether adequately or inadequately, is having an idea of it, logicians can do no more than formulate their foggy insights into relations of ideas as rules for operating with putative mental equivalents of sentences.

Finally, *causation*, as Spinoza conceives it, is a generic relation having two species: immanent (*immanens*) and transient (*transiens*) (E1p18,d). It is the relation by virtue of which the existence of an individual depends upon itself or upon another. Since, unlike Aristotle, Spinoza dismisses as superstitious the possibility that an existent in nature might normally have the power to produce another but fail to do so because of the recalcitrance of matter to form, he recognized no causal relation that is not necessary. In E1p8s2 he lays down two axioms that hold for it generically: "that there must be, for each existing thing a certain

cause on account of which it exists" (G II, 50/29-30); and "that this cause, on account of which a thing exists, must be contained in the very nature and definition of the existing thing or must be outside it" (G II, 50/30-33).

Immanent causation is the relation between an independent existent and an existent dependent on it: an individual either has this relation to itself or to another. Transient causation, by contrast, is the relation between two finite durational modes of which one depends for its existence on the other. Nothing can be the transient cause of itself.

5. Spinoza's Metaphysics (II): Fundamental Principles.

The first axiom in *Ethics* I is, "Whatever is, is either in itself or in another" (G II, 46/21). Since its sense is not obvious, neither is its truth or falsity. I regret that I must baldly assert what I believe its sense to be, hoping that at least some of my reasons will appear in what follows.

Spinoza's concept of *being in* has a dual ancestry. On one side, it descends from the still numerous family springing from Aristotle's concept of the relation an individual accident has to the substance it is present in. On the other, it descends from the now shrunken family of concepts of the relation of a cause of being (as distinct from a cause of becoming) to its effect.

Its ancestry in the first line explains why Spinoza takes it for granted that a being in which another is cannot itself be in yet another; as he does in demonstrating his fourth theorem, when he says:

Whatever is, is in itself or in another (by E1a1), *that is*, (by E1d3,5) outside the intellect there is nothing except substances [= whatever are in themselves] and their affections [= whatever are in substances] (G II, 47/7-9: my emphasis).

If beings could be in beings that were themselves in something else, there could be affections that are not affections of substances. Spinoza here shows that his conception of *being in* excludes that. In the same way, Aristotle's conception of *present in* excludes the possibility that accidents be present in other accidents.

The linkage of this line of ancestry with the second, that being in something is being immanently caused by it, is the source of Spinoza's characteristic doctrines that no substance can be produced by another (E1p6) and that every substance necessarily exists (E1p7d). But it has even more radical consequences. His contemporaries, whether they were Aristotelians or advocates of the new mechanical principles, did not question that the natural world is made up of substances and their affections; and in this he himself was a man of his time. But if natural substances are each independent necessary existents, there is no need to assert the existence of any supernatural ones. Either God is a natural substance, or there is no God at all.

The identification of the relation of *being in* with that of *being immanently caused by*

yields an alternative version of the axiom that

Whatever is, is in itself or in another [which is in itself] (E1a1): namely, the unformulated axiom that

Whatever is, is immanently caused by itself or is immanently caused by another [which is immanently caused by itself].

And in view of that identification, the fourth axiom of *Ethics* I, Cognition of an effect depends on, and involves, cognition of its cause, yields two characteristic Spinozist doctrines that are assumed in his formal definitions of substance and mode.

According to those formal definitions, a substance is something that is in itself and is conceived through itself (E1d3); and a mode (the word, and the second part of the definition, derive from Descartes¹²) is an affection of a substance: that is, something that is in another which is in itself, through which it is conceived (E1d5). If whatever is in something is an immanent effect of that thing (as it must be if it is immanently caused by it), and if cognition of an effect involves cognition of its cause, then whatever is in something must be conceived through it. And so whatever is in itself must be a substance according to Spinoza's definition; and whatever is in another which is in itself must be a mode according to Spinoza's definition.

Hence the three pairs of relational properties that are fundamental to Spinoza's metaphysics, namely,

- (i) *in itself* and *in another [which is in itself]*,
- (ii) *immanently caused by itself* and *immanently caused by another [which immanently causes itself]*, and
- (iii) *conceived through itself* and *conceived through another*,

are such that whatever has the first member of any of them must also have the first member of each of the others, and that whatever has the second member of any of them must also have the second member of each of the others.¹³

The connections thus established between these three relational properties constitute all except one of the fundamental principles of Spinoza's metaphysics. And that metaphysics recognizes nothing as existent except natural substances and their affections or modes.

Natural substances, however, are not what they are commonly believed to be. Every substance, being immanently caused by itself, necessarily exists, that is, its essence involves existence. And since Spinoza defines eternity as "existence itself, in so far as it is conceived to follow necessarily from the definition alone of an eternal thing" (E1d8), every substance is eternal. Again, every substance is infinite in its nature or essence. This can be shown in several ways. The most direct is that

since being finite really, in part, a negation, and being infinite is an absolute affirmation of the existence of some nature, it follows from [the theorem that it pertains to the nature of substance to exist -- E1p7] that every substance must be infinite (E1p8s; cf. E1p8d).

The finite things in nature that are commonly taken to be substances can therefore (by E1a1) only be things that are in the true infinite substances: that is, can only be their affections or modes.

6. Spinoza's Pluralism: the Real Distinction of Nature's Attributes.

What are the infinite substances which, with their modes, are all there is? Well, what essences involve existence, and so are eternal and infinite? Since Spinoza defines an attribute as "what intellect perceives concerning substance, as constituting its essence" (E1d4), *prima facie*, this question can be answered by ascertaining what attributes constitute such essences.¹⁴

Since substances are conceived through themselves, the attributes that are perceived as constituting their essences will be really distinct if they can each be conceived through themselves, that is, each "without the help of" any other (cf. E1p10s -- G II, 52/2-3). One of Spinoza's earliest metaphysical conclusions was that Descartes' identification of the two attributes that constitute the essences of substances in the natural world, namely, extension and thought, had a significance which had been overlooked. By directing their attention to what is said of God in the Jewish, Christian and Muslim Scriptures, the supernaturalizing medieval theologians (he seems to have had Maimonides particularly in mind) had prematurely concluded that God can be conceived only negatively or figuratively; and hence that nothing positive expressing the divine essence -- no divine attribute -- is within human comprehension (cf. KV I, 7 -- G I, 44/9-46/5). Not even Descartes had been able to shake off the prejudice that nothing natural can be eternal and infinite. Thus it was left for Spinoza to point out that extension and thought express eternal and infinite essences (cf. KV I, 2). Anything extended or thinking, if it really is a substance, must be eternal and infinite.

Extension and thought, however, are really distinct, as Descartes had perceived; for each can be conceived without the help of the other. Must it not then be concluded that the natural world, as human beings conceive it, consists of at least two substances, one extended and one thinking? To any Cartesian who followed Spinoza to this point, that inference would have been inevitable. And it was pressed upon him as early as February 1663 by Simon de Vries, a young friend and benefactor, writing on behalf of a group meeting in Amsterdam to discuss an early version of the *Ethics* (Ep8 -- G IV, 39/8-22). Apart from special assumptions such as that implicit in Spinoza's definition of God, de Vries wrote,

if I should say that each substance has only one attribute, and if I had the idea of two attributes, I could rightly conclude that, where there are two different attributes,

there are two different substances (Ep8 -- G IV, 41/10-13).

And if really distinct attributes each constitute the essence of a substance, how can the substances whose essences they constitute be fewer than they? That is, how can any substance have more than one attribute?

7. Substance Monism and Attribute Pluralism: Spinoza's Replies to de Vries.

In effect, de Vries proposes a principle for determining what substances there are, namely that

each attribute expressing an eternal and infinite essence constitutes the essence of a really distinct substance.

Let us call it 'de Vries's Principle'. Its ground is easily discerned. An attribute, by definition, 'constitutes' the essence of the substance which has it. What 'constitutes' means in this connection is not clear: presumably something less than 'is identical with'. However, lacking any indication that Spinoza understands 'constitute' in any way in which his contemporaries would not have, it would be paradoxical to suppose that the essences two really distinct attributes 'constitute' are not also really distinct. On the face of it, de Vries had reason to claim that his principle is *per se notum*. And if it is true, then there are at least two eternal and infinite substances.

Spinoza's definition of God as "a being consisting of infinite attributes [that is, all the attributes there are¹⁵], of which each one expresses an eternal and infinite essence" (E1d6), presupposes a principle contrary to de Vries's, namely that

every attribute expressing an eternal and infinite essence can constitute the essence of one and the same substance.

Let us call this 'Spinoza's Principle'.¹⁶ The objection to it which Spinoza must meet is that de Vries's contrary principle appears to be *per se notum*.

Spinoza's own replies to de Vries, whether expressly in correspondence (Ep9), or implicitly in the *Ethics* (E1p10s, 11s), both on their face beg the question at issue.

In the former, he claimed that he had demonstrated that "a substance ... can have more attributes than one" in two ways. The first was that "since the more reality or being a thing has, the more attributes must be attributed to it," it follows that a being absolutely infinite must have every attribute that expresses an eternal and infinite essence (G II, 52/10-16). The second was that

the more attributes I attribute to a being the more I am compelled to attribute existence to it; that is, the more I conceive it as true. It would be quite the contrary if I had

feigned a Chimaera, or something like that (G IV, 45/18-24).

Even in later versions of the *Ethics* than that about which de Vries was writing, he continued to repeat both these arguments (G II, 52/10-16; 54/29-34).

To both de Vries might have objected that nothing can be defined as having more attributes than anything can have. If his principle is true, then nothing can have more than one attribute, and hence, if there are more attributes than one, nothing can be absolutely infinite in the sense of Spinoza's definition of God. Although Spinoza insists that defining God as he does is not like feigning a Chimaera, de Vries's implicitly replies that it is. Moreover, if nothing can have more than one attribute, attributing more than one to a thing, far from more strongly compelling us to affirm its existence, would compel us to deny it.

Spinoza's treatment of de Vries's difficulty is perplexing. It is formulated almost wholly in terms of traditional natural theology, and yet both the conclusions he draws and the principle he presupposes in drawing them are revolutionary. I submit that he can be defended only if some new interpretation can be found of what he says. If the old bottles in which he puts his new wine can contain it without bursting, then it is not worth drinking.

In arguing that "the more attributes I attribute to a being the more I am compelled to attribute existence to it" (G IV, 45/22-24), Spinoza anticipates an idea Leibniz was to restate in terms of possible beings.

[A]ll possible things [Leibniz wrote], or or things expressing an essence or possible reality, tend toward existence with equal right in proportion to the quantity of essence or reality, or to the degree of perfection they involve; for perfection is nothing but quantity of essence.¹⁷

About such passages, Benson Mates has warned us that

it would be absurd to take literally Leibniz's oft-repeated principle that all the possibles 'strive for existence'... In the context of his philosophy this obviously means that whatever is compossible with what exists, exists -- i.e. that if God could create *x*, then he would do so unless the existence of other things prevents it.¹⁸

Leibniz speaks of possible beings as "tending toward existence" more or less strongly, as though possible beings can tend or strive, even though he does not believe for a moment that anything but actual beings can do so. And so when he describes worlds less good than the best possible as tending to exist less strongly than the best possible one, all he means is that, since the best possible world is the one God has created, nothing except what is in that world can exist.

I have already argued that, like those who developed the mechanical conception of physics, Spinoza takes the task of philosophy to be to ascertain what composes the natural

world as it is, and what laws explain the processes that go on in it. No more than Leibniz, as Mates interprets him, could he literally have believed that beings with fewer attributes than his God lack existence because, although they have some tendency to exist, it is weaker than God's. The struggle for existence between possible beings is no more than a metaphor for the more prosaic truth that, given the natural world as it actually is, it is self-contradictory to ascribe existence to logically possible beings that are not in it.

If this is so, then his a priori argument for God's existence, which appears to go from God's nature, presented as a mere possibility, to his actual existence (E1p11s -- G II, 54/3-9), cannot be as it appears. What then is it?

8. The Naturalist Foundation of Spinoza's Replies to de Vries.

According to Spinoza's naturalization of metaphysics, the question which principle about what a single attribute constitutes is true, de Vries's or his own, is not about what is logically possible, but about how the natural world in fact is. It can be answered a priori only in the sense in which the question which of the laws of inertia is true, Aristotle's or Descartes', can be: that is, by reflecting on the complex ideas we have of what the rival principles are about. Human beings have ideas of only two attributes: extension and thought. But their ideas of extended things and thinking things are as rich as their idea of motion, and furnish sufficient material for reflection.

Curiously, the only passage I have found which unambiguously shows that Spinoza did reflect in this way is in the *Korte Verhandelng*. Having formulated the question, "[W]hy ... have [we] said that all these attributes which are in Nature [and of which human beings know two] are only one single being, and by no means different ones (though we can clearly and distinctly understand the one without the other)?" (G I, 23/14-17), he sandwiches the following answer between two question-begging considerations of the kind he resorted to in replying to de Vries. We say it

[b]ecause of the unity which we see everywhere in Nature; if there were different beings in Nature, the one could not possibly unite with the other (KV I, 2 -- G I, 23/27-29).

To conceive the substances attributes constitute in terms of de Vries's principle would be as absurd as to conceive motion in terms of Aristotle's law of inertia: it would make it impossible to incorporate into our conceptions of extended substance and of thinking substance ideas of them which we actually have and cannot get rid of.

The parallel is close. Just as we see motions coming to an end with no apparent cause, so we encounter finite extended objects that do not appear also to be finite thoughts. In the former case, we correct the false idea that what we see tempts us to form by bringing it into conformity with our ideas of other motions, such as those of projectiles we try to stop. In the same way, Spinoza proposes to correct the false idea which our encounters with non-animal external objects tempt us to form by bringing it into conformity with the ideas we each have

of the only thoughts we immediately cognize -- our own: as each of us can verify, ideas of the extended world as it acts upon our bodies and as our bodies react to it, are the foundation of all our other ideas. But if that is so, then the infinite thinking substance of which our minds are finite modes cannot exist independently of the infinite extended substance of which our bodies are finite modes. That there are extended modes that are not also thinking modes is as much an appearance as that there are motions that cease of their own accord.

9. Elucidating Spinoza's Monism: What it is for Distinct Attributes to 'Constitute' the Essence of the Same Substance.

In arguing that really distinct attributes can constitute the essence of one and the same substance, Spinoza's use of the metaphor of possible beings struggling for existence was excusable, given the theological situation in which he wrote. Yet it was as misleading as it is now out of date. Now that the sort of reason he would have given, if only he had denied himself that metaphor, has been revealed by the passage to which I have referred in the *Korte Verhandelng*, I submit that we should deny ourselves the use of that metaphor in interpreting him.

If we do, we can begin to construct the answer to de Vries that Spinoza might have made, but did not. The principle which de Vries invoked against Spinoza, that each really distinct attribute constitutes the essence of a really distinct substance, rests on the assumption that 'constitutes' means, if not 'is identical with', then something close to it. That assumption is natural if it is also assumed, with Spinoza's contemporaries and most of his successors, that to state what constitutes the essence of something is to define it.

Some years ago, I ventured to suggest that Spinoza rejected this whole line of thought.

Why not [I wrote] think of the essence of ... a substance [as Spinoza conceives it] as standing in a unique relation to each of its attributes: a relation neither of definitional identity nor of causality; a relation, moreover, which might reasonably be signified by speaking of each attribute as "constituting" ("*constituens*") or "expressing" ("*exprimens*") that essence? A fundamental formal property of this relation would be that two attributes might on the one hand be really distinct, and on the other constitute or express the same essence.¹⁹

Unfortunately, as Bennett justly commented,

[this] proposal tells us nothing about the actual content of Spinoza's doctrines. It says only that his substance monism means *something* consistent with his property dualism: we are not given a glimmering of *what* doctrine the monism might be ...²⁰

Nevertheless, I hope that what has been said in the present paper may yield a glimmering of it.

Spinoza's argument in the *Korte Verhandelng* presupposes that two really distinct attributes constitute the same essence if it is a law of nature that the finite modes of a substance conceived as constituted by one correspond to the finite modes of a substance conceived as constituted by the other. And the finite modes conceived by two really distinct attributes will correspond if, in the language of *Ethics* II, 7, they have "the same order and connection." What I have called 'Spinoza's principle', that every attribute expressing an eternal and infinite essence can constitute the essence of one and the same substance, amounts to this: that it is logically possible that it is a law of nature that the finite modes of a substance conceived as constituted by any attribute expressing an eternal and infinite essence have the same order and connection as the finite modes of the substance whose essence is conceived as constituted by any other.

There seems to be no reason why it could not be a law of nature that the finite modes of the substance conceived as constituted by extension have the same order and connection as the finite modes of the substance conceived as constituted by thought. And if this is a law of nature, as Spinoza believed, then according to his argument in the *Korte Verhandelng*, the substances conceived as constituted by extension and thought are one and the same, with one and the same essence; and their corresponding modes are one and the same too (cf. E2p7s -- G II, 90/2-9). The theorem that God, a being consisting of *every* attribute expressing an eternal and infinite essence (E1p11), necessarily exists, simply means that this is a law of nature.

The obvious and strong objection to this interpretation is that, if it is true, the demonstrations Spinoza offers of both theorem and principle, taken literally, are not merely unsound but question-begging and misleading; and that nobody as aware of what he was doing as he was could have offered them.

To this, the best reply is that nobody who naturalizes metaphysics as Spinoza does throughout his writings could intend perceptive readers to take those demonstrations literally. And even if it should mislead imperceptive readers, why should he not avail himself of the language of natural theology current in his time? The example of Leibniz, as Mates interprets him, shows that he was not the last to put his new wine into old bottles.

Such a reply, however, would be sophistical. Spinoza's theorems can be understood in terms of his naturalization of metaphysics, and, I submit, are coherent only if they are so understood. But some of his demonstrations, particularly those of propositions 10 and 11 in *Ethics* I, cannot be so understood, and are incoherent on any terms. Yet that is at least excusable. Pollock said what needs saying over a century ago:

[T]he task Spinoza took upon himself ... was [not] altogether a possible one; and it is at least doubtful if Spinoza himself was aware of its magnitude. I do not think he realized the extent of the revolution which was really involved in his use of philosophical terms... He thought he was correcting erroneous interpretations, when he was in truth abrogating the text. Thus we find almost everywhere in his work scientific and essentially modern thought clothed in the semblance of scholastic forms; and this

creates for the modern reader an illusion which it is extremely difficult to shake off.²¹

It is not discreditable to Spinoza that he himself now and then lost sight of what he was doing, and fell back into familiar and accepted ways of thinking. What matters is that the structure of his thought is clear enough to reveal his lapses from it.

NOTES

- ¹ Pollock described "the task Spinoza took upon himself" as to breathe new life into traditional philosophy "through the new [scientific] conception of things" (Pollock, 156 and ch. 5 *passim*); and Curley has worked out the theme Pollock sketched (Curley, 49; and ch. 2, "The Causality of God" *passim*).
- ² Bennett, 29-30, esp. 30. I pass over Bennett's view that Spinoza's causal rationalism is virtually forced on him by his explanatory rationalism, because I see no good reason to believe that he was an explanatory rationalist.
- ³ Bennett himself disposes of one bad reason for doing so: namely that Spinoza sometimes uses the language of causality in discussing logico-mathematical topics. For example, Abraham Wolf, in his edition and translation of Spinoza's *Correspondence*, cites a passage from Ep60 in which the word 'cause' is used to refer to a method of geometrical construction that would necessarily exist even if nobody implemented it (Wolf, 60-61: the passage cited is G IV, 270/27-271/2). Bennett rightly insists that such uses of the word 'cause' do not implicitly identify causality with logical necessity (Bennett (1), 30).
- ⁴ Bennett (1), 30.
- ⁵ Bennett (1), 30.
- ⁶ Despondency is defined as "thinking less highly of oneself than is just, out of Sadness" (E4, Def. Aff. 29); and Sadness as "man's passage from a greater to a lesser perfection" (E4, Def. Aff. 3) -- a passage which, on Spinoza's causal principles, is a change in both bodily and mental state, which has the effect of both reduced capacity to act and reduced power to form adequate ideas. Given such concepts of Despondency and Sadness, it logically follows that, if somebody is despondent, he must be more prone to affects arising from ignorance and weakness, such as Envy, than somebody who is not despondent (E4p57s --G II, 252/22-27). However, it does so because reference to certain causal laws is built into the concepts of Despondency, Sadness and Envy; and that it does so implies nothing whatever about the nature of causal necessity. My argument here owes much to Curley, 64-74.
- ⁷ Spinoza himself, in *Ethics* II, 13 add., employs a question-begging a priori argument like Descartes's (G II, 99/1-7). But his use of bad a priori arguments in conjunction with good a posteriori ones (as here) does not show that they are primary in his thought.

⁸ Hall and Hall, 254.

⁹ Newton, 400; quoted by Hall and Hall, 254.

¹⁰ Spinoza's concept of essence is found elusive by most of those who write about it in English. The best treatments of it I have found are Gueroult, I, 548-49, and Matheron, esp. 10-12, 18-22.

¹¹ Arnauld and Nicole, Part I, esp. chs. 1-2. The opening sentence of ch. 1, "Le mot d'*Idee* est du nombre de ceux qui sont si clairs qu'on ne les peut expliquer par d'autres, parce qu'il n'y en a point de plus clairs et de plus simples" (p. 66), should be kept in mind.

¹² Descartes, AT VIII-1, 26/19-22; 29/18-22.

¹³ A complication should be mentioned, although I have no time to explore it. If all modes are in another, caused by another, and conceived through another, then all modes are finite. But Spinoza allows himself to speak of some infinite and eternal individuals as 'modes': namely, those that follow from the absolute nature of any of God's attributes (E1p21). Spinoza's definition of eternity confirms what is obvious from what he writes about these individuals, that the existence of each of them is conceived to follow necessarily from its definition alone (E1d8); from which it follows that each of them is in itself and is immanently caused by itself. Yet there is a sense in which each is not conceived through itself: namely, that an adequate idea of it is distinguishable from an adequate idea of the attribute from the absolute nature of which it follows. Of course, there is a sense in which each is conceived through itself: namely, that its existence follows necessarily from what is represented by the adequate idea formulated in its definition. Here as elsewhere, Spinoza implicitly recognizes that although the *ordo et connexio* of ideas of finite things is identical with that of the *ordo et connexio* of those finite things (cf. E1p7), the internal structure of adequate ideas of an infinite thing may not be that of the thing itself. *Deus sive Natura* and its eternal modes are one and the same existent; but the adequate ideas by which we cognize it are not one and the same.

¹⁴ Whether intellect is taken to refer to intellect generally, to infinite intellect, or to finite intellects, nonsense results from taking the phrase 'what intellect perceives' as anything but an ellipsis for 'what intellect *truly* perceives'. Hence an attribute is not merely *perceived* to constitute the essence of a substance, but in fact constitutes it; and, since a thing and its essence are not really distinct, Spinoza does not scruple to speak of attributes as constituting substances themselves (e.g. G II, 52/3-5). On the whole '*Controverse sur l'Attribut*' see Gueroult, I, 428-68.

¹⁵ Cf. Kline, 341-47, 351-56. Kline acknowledges debts to Joachim, 23, and to Wolf, 26; and has useful notes on their critics, e.g. in his notes on Hallett and Savan.

¹⁶ Martial Gueroult has offered an alternative reading: that each really distinct attribute constitutes the essence of a really distinct substance of one attribute, infinite in its kind; and that God, the absolutely infinite substance, is the necessary union of these really distinct substances. And so he takes Spinoza's God to be, like each of Descartes's human beings, a union of really distinct substances, although unlike them, a necessary union (cf. Gueroult I, 230-32). The textual evidence is surprisingly indecisive. On Gueroult's side, Spinoza's definition of God leaves it open whether each of his attributes constitutes a distinct essence or not, and in asserting that a substance may have many attributes, he describes those attributes as constituting it, not its essence (E1d6 and p10s). Against Gueroult, although Spinoza once speaks of a substance of one attribute (E1p8d), he nowhere does so in a context in which he asserts that such substances exist. My own greatest difficulty with Gueroult's interpretation is that it excludes every possible explanation of how the union of the really distinct substances of one attribute into an indivisible absolutely infinite being can be *necessary*. It cannot be necessary by virtue of an external cause, because God is *causa sui*. Nor can it be necessary by virtue of an internal cause, if both the attributes and the essences they constitute are really distinct; for God is nothing but his attributes. On the other hand, if each of the attributes constitutes the same essence as the others, the explanation is obvious.

¹⁷ Leibniz, "On the Radical Origination of Things" (Loemker, 487; tr. from Gerhardt, *PS*, VII, 302-8). It is difficult to believe that Leibniz did not have in mind *Ethics* I, 11d,s (esp. G II, 52/31-53/2; 53/29-31; 54/5-9).

¹⁸ Mates, 73.

¹⁹ Donagan, 180.

²⁰ Bennett, 144.

²¹ Pollock, 156-57. Curley quotes a related passage as the epigraph to *Spinoza's Metaphysics*, ch. 3.

REFERENCES

(1) *Spinoza's Writings*

Gebhardt, Carl (ed.). *Spinoza Opera* (Heidelberg: Carl Winter, N.D.). 4 vols. (Abbreviated as 'G'.)

I am responsible for all translations; but I mostly follow those of Edwin Curley for the works translated in his *The Collected Works of Spinoza* (Princeton: Princeton University Press, 1985), vol. 1. I also follow Curley's conventions in giving abbreviated references to Spinoza's writings.

(2) *Books and Articles Cited*

Arnauld, Antoine, and Nicole, Pierre. *La Logique ou l'Art de Penser* (Paris: Flammarion, 1970). [Based on the fifth edition, Paris: Guillaume Desprez, 1683.]

Bennett, Jonathan. *A Study of Spinoza's Ethics* (Cambridge: Cambridge University Press, 1984).

Curley, Edwin M. *Spinoza's Metaphysics: an Essay in Interpretation* (Cambridge, Mass.: Harvard University Press, 1969).

Descartes, Rene. Ed. Charles Adam and Paul Tannery. *Oeuvres de Descartes* (Nouvelle Presentation, en Co-Edition avec le Centre National de la Recherche Scientifique. Paris: J. Vrin, 1964-75). 11 vols. (Abbreviated as 'AT'.)

[For the most part I follow the good translations from AT in: Cottingham, John; Stoothoff, Robert; and Murdoch, Dugald (eds. and trs.). *The Philosophical Writings of Descartes* (Cambridge: Cambridge University Press, 1985). 2 vols.]

Donagan, Alan. "Essence and the Distinction of Attributes in Spinoza's Metaphysics." In Grene, Marjorie (ed.). *Spinoza: a Collection of Critical Essays* (New York: Doubleday, 1973), pp. 241-58.

Gueroult, Martial, *Spinoza*. (Paris: Aubier-Montaigne, 1968-74). 2 vols. published.

Hall, A. Rupert and Hall, Marie Boas. "Philosophy and Natural Philosophy: Boyle and Spinoza." In *Melanges Alexandre Koyre II: l' Aventure de l' Esprit* (Paris: Hermann, 1964): 241-56.

Hessing, Siegfried (ed.). *Speculum Spinozanum 1677-1977* (London: Routledge and Kegan Paul, 1977).

Kline, George L. "On the Infinity of Spinoza's Attributes." In Hessing (ed.), 333-52.

Leibniz, Gottfried Wilhelm. Ed. C.I. Gerhardt. *Die Philosophische Schriften*. (Berlin, 1857-90; reprinted Hildesheim: Georg Olms, 1965). (Abbreviated as '[Leibniz] PS'.)

[In translating *PS* I follow Loemker, Leroy. *Leibniz: Philosophical Papers and Letters* (2nd. edn. Dordrecht: Reidel, 1969).]

Mates, Benson. *The Philosophy of Leibniz: Metaphysics and Language* (New York: Oxford University Press, 1986).

Matheron, Alexandre. *Individu et Communauté chez Spinoza* (Paris: Editions de Minuit, 1969).

Pollock, Frederick. *Spinoza: his Life and Philosophy* (London: C. Kegan Paul: 1880).

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